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Public Health Practitioner Expert Opinion for Recommending Revisions to a Community Nutrition MPH Curriculum

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Abstract
Soliciting practitioner input into the planning or revision of Master of Public Health programs is desirable to ensure that students are adequately prepared for public health practice. Members of the American Dietetic Association Public Health/Community Nutrition Dietetic Practice Group (ADA-PH/CNDPG) were surveyed regarding the structure of, as well as the knowledge and skills desirable for, inclusion in a Master of Public Health community nutrition program. A total of 998 surveys were mailed in June 2001 with a return rate of 34%. Approximately 73% of respondents indicated public health employment. The average response regarding optimal time for full-time degree completion was 21.5 months. Almost 60% indicated that a practice component should be required. Important topics to be included in a degree core were assessed as: (1) community assessment; (2) program planning; and (3) health promotion/disease prevention. Nutrition content areas ranked highest were: (1) nutritional epidemiology; (2) nutrition and chronic disease; and (3) nutritional assessment. Core areas ranked highest to be separate courses were: (1) epidemiology; (2) community assessment; and (3) health promotion/ disease prevention. Nutrition areas ranked highest to be separate courses were: (1) nutritional epidemiology; (2) nutrition education; and (3) nutrition and chronic disease prevention. Survey results will help educators better prepare students for practice.
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Introduction

Education of community nutritionists needs to relate to expectations of practitioners and educators already in the field of community nutrition. Public health nutritionists have specialized training in population-based assessment, epidemiology, critical thinking, and policy development and assurance (Hess & Haughton, 1996; Dodds, Laraia, & Carbone, 2003). There is a need for 21st century public health nutritionists to have knowledge and skills related to data analysis, assessment, surveillance, program planning, program evaluation, leadership, and policy formation (Johnson, Eaton, Wahl, & Gleason, 2001). The academic curriculum and level of preparation (i.e., degree) are two important factors that shape the future success of a public health nutritionist. According to one study on the future training needs in public health nutrition, a master's degree in public health nutrition ranked as the most important credential, followed by dietetic registration with a focus in public health (Hess & Haughton, 1996). A national survey of leaders in public health practice defined the need for graduate public health programs to reevaluate their curricula and become more responsive in the future (Olmstead-Schafer, Story, & Haughton, 1996). Knowledge and skill areas to be included in Master of Public Health (MPH) community nutrition programs have been promulgated by the Association of Graduate Programs in Public Health Nutrition, Inc. (2002).

An important recommendation for improving public health curricula is to build strong alliances between academic and community agency settings (Olmstead-Schafer, Story, & Haughton, 1996; Keck, 2000). The link between public health programs and practice in community agency and other settings provides students and practitioners the opportunity to utilize each other for research, implementation, training, and public policy development (Keck, 2000; Scrimshaw & Rosenfield, 1999).

Education in Florida with a public health nutrition focus is currently limited. It is anticipated that as Florida education expands in this area studies such as this one will become increasingly relevant for degree and certificate programs, as well as for planning of continuing education programs.

Purpose of the Study

The purpose of this study was to survey members of the American Dietetic Association Public Health/Community Nutrition Dietetic Practice Group (ADA-PH/CNDPG) to obtain their views on structure of an MPH degree with a community nutrition focus. Views on knowledge and skills desirable for inclusion in an MPH community nutrition program also were assessed. The ADA-PH/CNDPG has members nationwide working in public health nutrition, public health nutrition education, and/or with a strong interest in public health nutrition practice.

Methods

A questionnaire was developed and content validity was assessed by a small group of community nutritionists that included ADA-PH/CNDPG representation. The questionnaire was mailed to 998 ADA-PH/CNDPG members in June 2001. Information was requested about current employment in public health nutrition, workplace, educational degree, and years in public health practice. Questions related to a community nutrition prototype MPH program involved obtaining opinions related to optimal time to degree, the desirability of a nutrition practice component, eligibility for program admission, and employer preference for the MPH in community nutrition degree. Respondents also were asked to rate core public health and community nutrition knowledge and skill areas with respect to desirable structure within an MPH community nutrition curriculum, and also rate topics as to their importance to the curriculum.

Most questions were analyzed based on percentages of response. However, importance of topics to the curriculum was examined in two other ways – ranking for most important topics and listing least important topics. The survey asked respondents to identify and rank the five *most important* knowledge and skill areas related to both the public health core and nutrition content. Composite rankings of importance for all respondents were determined by summing individual respondent rankings. Respondents also were asked to list what they considered to be the two *least important* core public health and nutrition knowledge and skill topics for practice.

Results

The return rate for the survey was 34% (N=339). Approximately 73% of respondents indicated current employment in public health nutrition. A total of 154 reported employment in county, state, or federal agencies. Almost 49% of respondents indicated employment in public health of 11 or more years. In all, 82 respondents indicated that they had an MPH degree and 7 indicated that they had a DrPH degree. Slightly over 55% of respondents held a degree at the Master's level other than the MPH.

The mean expectation regarding time to degree completion for a full-time student was 21.5 months with a mode of 24 months. Approximately 59.9% of respondents indicated that a nutrition practice component should be required for a community nutrition MPH degree regardless of the student's background. Slightly over 33% indicated that the practice component should be optional or required dependent upon the student's background. Approximately 46% of respondents indicated that non-Registered Dietitians (RDs) should only be admitted if the degree had an internship component. Another 32% favored admitting non-RDs even if the degree did not contain an internship, 16% favored limiting admission to RDs only.

There were 128 respondents (38%) who reported being public health nutrition employers. Of these, almost 40% indicated they would give preference to a community nutrition MPH degree candidate in hiring and another 21 respondents (16.4%) reported they would like to give preference to the MPH degree but could not do so due to organizational rules. Some 44% of employer respondents indicated that they would not give preference to an applicant with an MPH in community nutrition degree as opposed to other types of Master's degrees.

Respondent thoughts about the structure of coursework related to public health core knowledge and skill areas are shown in Table 1. Ratings indicated that there were eight core knowledge and skill topics that over 50% of respondents felt should be taught as separate courses. These topics were: epidemiology, community assessment, health promotion/disease prevention, program planning, overview of public health, biostatistics, research methods, and program evaluation. Results from this study confirmed that respondents concur with the Council on Education in Public Health (CEPH) emphasis on epidemiology, health services administration, social and behavioral sciences, and biostatistics as being important cornerstones of the MPH degree (Council on Education for Public Health, 2005).

In a separate analysis, respondents ranked the most important topics to be included in the core curriculum as being: (1) Community Assessment; (2) Program Planning; (3) Health Promotion/Disease Prevention; (4) Epidemiology; and (5) Overview of Public Health. Least important core topics included: Trend Analysis (n=60), Marketing (n=60), Worksite Health Promotion (n=55), Environmental Health (n=44), Politics of Public Health (n=34), Health Care Organization (n=33), Health Care Financing (n=28), and Quality Assurance/Improvement (n=28).

The low ranking related to the desirability of a separate environmental health course (38.1%) in the core and the number of respondents citing Environmental Health as a relatively unimportant topic are unexpected findings because major public health nutrition foci in recent years have been prevention of foodborne illnesses and prevention of health-related problems related to environmental contaminants in food and water.

Table 1. MPH Core Knowledge and Skill Areas for Inclusion in Community Nutrition MPH Curriculum

Topic	Separate Course (%)	Included in a Course (%)	Need Not Be Included (%)
Epidemiology	79.4	14.8	1.2
Community Assessment	69.0	25.7	0.3
Health Promotion/Disease Prevention	68.4	26.8	0
Program Planning	65.2	29.8	0
Overview of Public Health	64.3	29.2	0.6
Biostatistics	63.4	28.9	2.4
Research Methods	57.5	35.4	2.1
Program Evaluation	51.3	44.0	0
Health Communications	44.8	47.5	1.8
Health Behavior Theories	43.1	50.4	1.5
Grant Writing	41.3	52.2	1.8
Environmental Health	38.1	51.6	4 1
Health Care Policy	38.1	54.9	2.1
Politics of Public Health	31.6	60.8	2.7
Budgetary Management	27.7	64.3	2.4
Social Marketing	27.4	65.2	2.4
Quality Assurance/Improvement	26.6	65.5	2.7
Health Care Organization	26.3	65.8	2.7
Trend Analysis	18.9	72.6	3.2
Marketing	18.3	64.6	12.4
Health Care Financing	16.5	74.6	3.8
Worksite Health Promotion	15.9	73.2	5.0
National Health Objectives	14.2	79.4	1.8

Note: Columns may not add up to 100% due to non-responses.

Opinions related to delivery format of community nutrition knowledge and skill areas courses are shown in Table 2. Over 50% of respondents believed that Nutritional Epidemiology and Nutrition Education should be separate courses.

In a separate analysis of nutrition content area importance, highest composite ratings were calculated for: (1) Nutritional Epidemiology; (2) Nutrition and Chronic Disease; (3) Nutritional Assessment; (4) Nutrition Education; and (5) Maternal Nutrition. Content areas considered least important were: (1) Food Service Management (n=124); (2) Specialty Products for Nutrition (n=70); (3) Exercise Physiology (n=47); (4) Processing, Food Production, Distribution and Consumption (n=44); and (5) [tie] Sports Nutrition and Non-Vitamin Non-Mineral supplementation (n=36 each).

Discussion

These survey results provide educators with ADA-PH/CNDPG member views of a community nutrition MPH curriculum. A relatively low response rate was a significant limitation with respect to the generalizability of findings. Most respondents reported 24 months as an ideal time frame for full-time study. Results also indicated that the majority of respondents support inclusion of a practice component, even for students who are already RDs. An area of further study would be to investigate what ADA-PH/CNDPG members and other public health nutrition practitioners see as career options for non-RD graduates of a community nutrition MPH program. Feedback related to types of practice experiences to be included in the curriculum is also an area for future study.

Employers' opinions related to the value of an MPH degree in community nutrition were mixed. Further research could focus on ways to enhance employer perception of an MPH degree with a community nutrition emphasis. An exchange of views between academicians and practitioners could assist in this mutual understanding.

Information obtained from ADA-PH/CNDPG members should provide guidance to educators with regard to the structure and content of curriculum. Educators who are not in the area of public health nutrition may benefit from review of the findings related to the MPH core curriculum. Further research could explore the extent to which current degree program curricula are responsive to opinions reported in this study.

This study was conducted prior to the publication of the Institute of Medicine (2002) report that identified eight emerging areas of importance for core curriculum in public health degrees (*informatics*, *genomics*, *communication*, *cultural competence*, *community-based participatory research*, *global health*, *policy and law*, and *public health ethics*). Further research could identify ADA-PH/CNDPG members' views of these recommendations and how they can be implemented through cooperation between academic and practice settings. The current study did find a high support for inclusion of policy in the MPH core curriculum. Over 38% of respondents felt this area should constitute a separate course. Almost another 55% felt this content should be taught as a part of a program course. Although views on the topic of global health were not assessed in the current study, it would be interesting to see current ADA-PH/CNDPG views on this subject because most respondents (about 68%) saw international nutrition as a course topic rather than as a separate course.

Continuing to utilize public health professional organization groups with large numbers of practitioners can provide important information to educators. Educational programs can be designed to prepare students better for the world of public health practice and to meet the expectations of potential employers.

Table 2. MPH Nutrition Knowledge and Skill Areas for Inclusion in Community Nutrition MPH Curriculum

Topic	Separate Course (%)	Included in a Course (%)	Need Not Be Included (%)
Nutritional Epi	62.5	29.5	0.6
Nutrition Education	50.4	39.5	4.4
Nutrition & Chronic Disease Prevention	46.3	42.8	4.1
Nutrition Assessment	45.7	42.5	5.9
Nutrition Counseling	40.7	43.7	8.9
Maternal Nutrition	39.2	51.6	3.5
Infant & Child Nutr.	39.2	51.6	3.5
Clinical Nutrition	34.5	28.0	31.9
Nutrition & Metabolism	32.7	43.1	17.1
The Media & Health/Nutrition Messages	31.9	60.8	1.2
Cultural Aspects of Nutrition	31.6	60.2	3.2
Public Health Nutrition, Agcy & Org	29.8	62.5	1.2
Geriatric Nutrition	28.0	62.0	3.5
Consumer Issues & Nutrition	27.7	62.2	4.1
Adult Nutrition	27.4	62.2	4.1
Nutrition & Chronic Disease (Treatment)	26.0	51.0	16.8
Obesity	26.0	63.7	5.0
Adolescent Nutrition	24.2	66.1	3.8
Economics of Nutrition	21.8	68.4	3.8
Food Safety	19.2	66.7	9.1
Sociological Aspects of Nutrition	18.0	69.6	5.0
Hunger and Malnutrition	17.1	74.9	2.7
Alternative Therapies	15.9	66.1	12.1
Exercise Physiology	14.5	49.6	29.5
Food Security	12.7	78.5	3.5
International Nutrition	12.1	68.7	12.4
Nutrition Mngmt - Diabetes	12.1	67.6	14.8
Food Production, Distribution, and Consumption	11.8	57.5	24.5
Nutrition Mngmt-CVD	11.2	67.9	14.8
Food Service Mngmt	10.3	32.2	51.6
Vitamin & Mineral Supplements	9.1	69.6	15.3
Nutrition Mngmt HIV/AIDS	8.0	70.5	16.2
Eating Disorders	7.1	72.6	15.0
Sports Nutrition	7.1	62.5	24.2
Non-Vitamin, Non Mineral Supplements	6.2	66.1	19.8
Specialty Nutrition Products	4.4	57.5	31.9

Note: Columns may not add up to 100% due to non-responses.

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